



# Arizona State Retirement System

Fourth Quarter 2009 Market Environment,  
Total Fund Review and Investment Outlook  
March 19, 2009

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*"Advancing Your Investments"*



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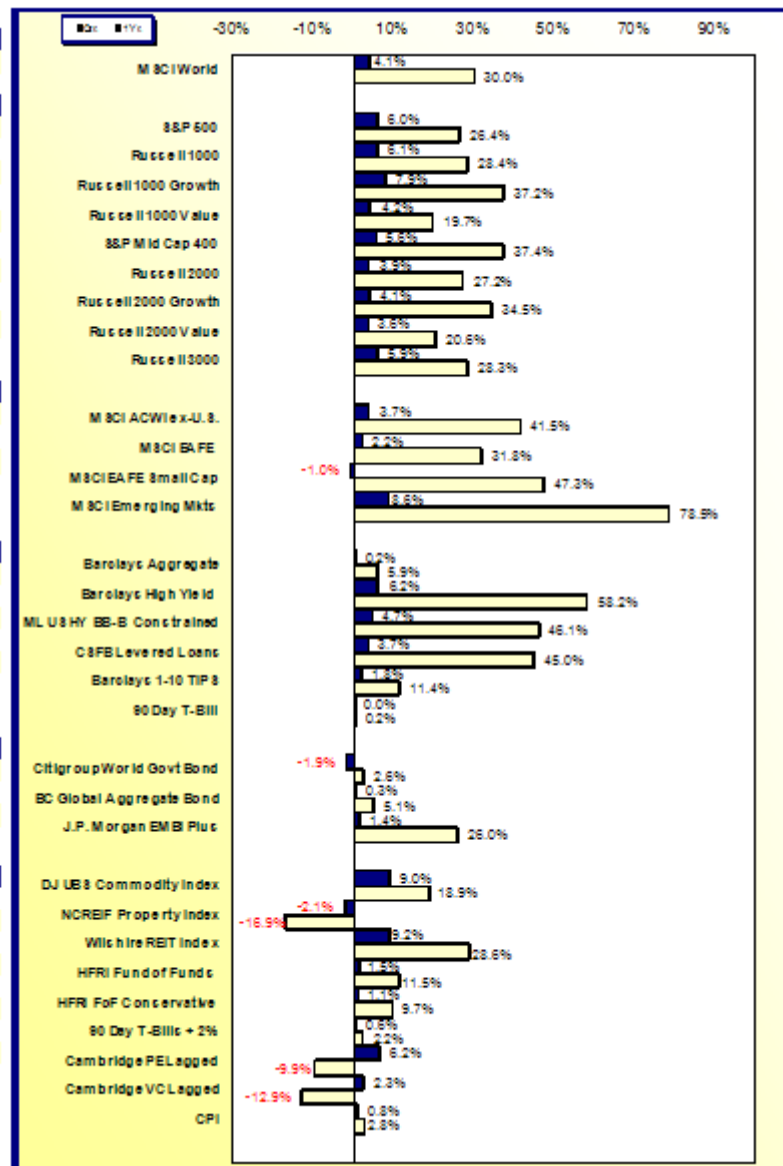


# Market Environment

Note: All of the data included in this report is as of December 31, 2009, unless otherwise noted.

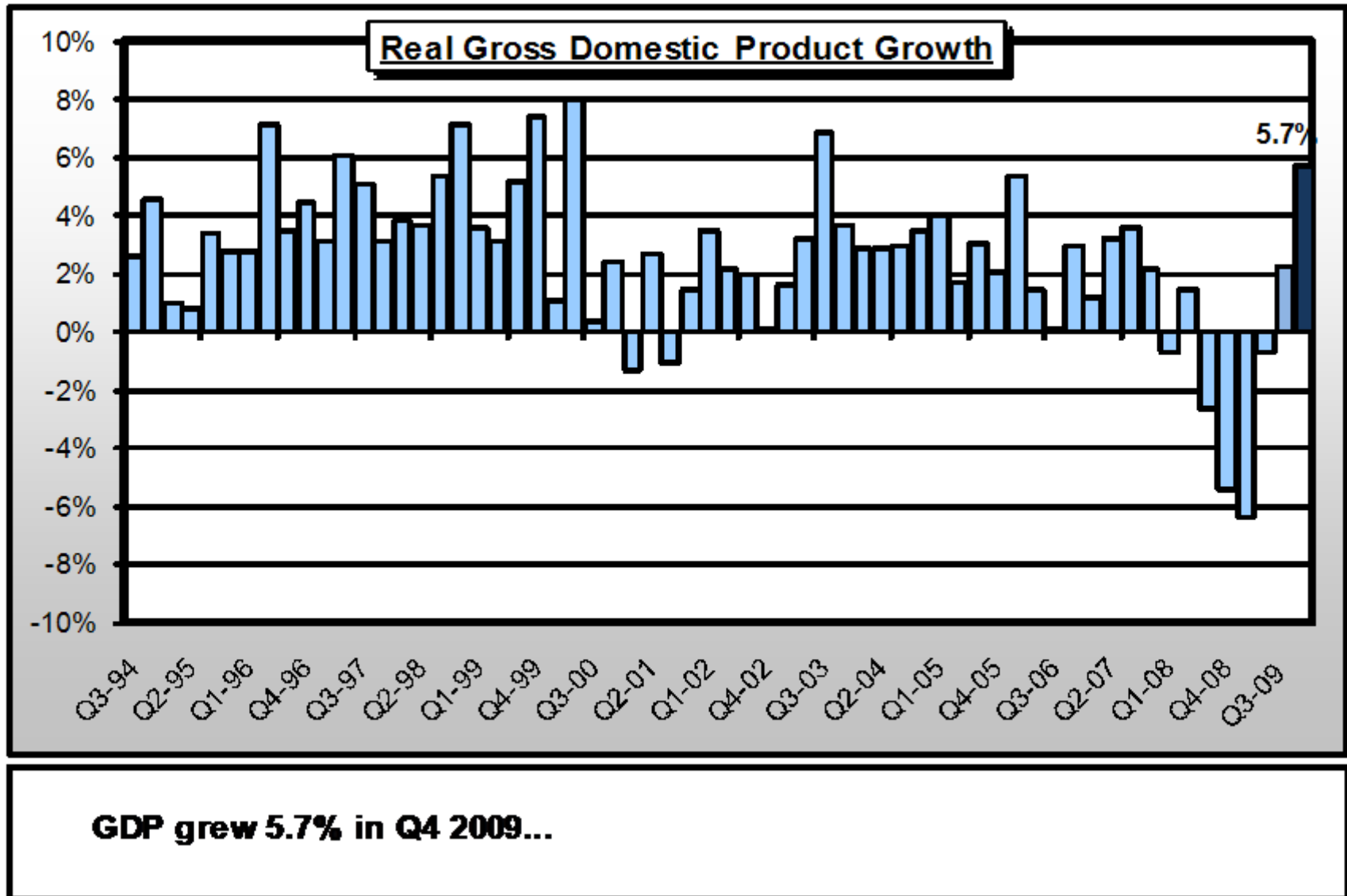
# Market Environment – Overview

		Ctr.	1Yr.	3Yr.	5Yr.	10Yr.
<b>World Equity Benchmarks</b>						
MSCI World	World	4.1%	30.0%	-5.6%	2.0%	-0.2%
<b>Domestic Equity Benchmarks</b>						
S&P 500	Large Core	6.0%	26.4%	-5.6%	0.4%	-0.3%
Russell 1000	Large Core	6.1%	28.4%	-5.4%	0.8%	-0.5%
Russell 1000 Growth	Large Growth	7.9%	37.2%	-1.3%	1.6%	-4.0%
Russell 1000 Value	Large Value	4.2%	19.7%	-9.0%	-0.3%	2.5%
S&P Mid Cap 400	Mid Core	5.6%	37.4%	-1.8%	3.3%	6.4%
Russell 2000	Small Core	3.9%	27.2%	-6.1%	0.9%	3.5%
Russell 2000 Growth	Small Growth	4.1%	34.5%	-4.0%	0.9%	-1.4%
Russell 2000 Value	Small Value	3.6%	20.6%	-8.2%	-0.0%	8.3%
Russell 3000	US Equity	5.9%	28.3%	-5.4%	0.8%	-0.2%
<b>International Equity Benchmarks</b>						
MSCI ACWI ex-U.S.	International	3.7%	41.5%	-3.5%	5.8%	2.7%
MSCI EAFE	Int'l Developed	2.2%	31.8%	-6.0%	3.9%	1.2%
MSCI EAFE Small Cap	Int'l Developed Sm. Cap	-1.0%	47.3%	-7.3%	3.9%	6.9%
MSCI Emerging Mkts	Int'l Emerging	8.6%	78.5%	5.1%	15.5%	9.8%
<b>Domestic Fixed Income Benchmarks</b>						
Barclays Aggregate	Core Bonds	0.2%	5.9%	6.0%	5.0%	6.3%
Barclays High Yield	High Yield	6.2%	58.2%	6.0%	6.9%	6.7%
ML US HY BB-B Constrained	High Yield	4.7%	46.1%	4.9%	5.9%	6.1%
CSFB Levered Loans	Bank Loans	3.7%	45.0%	1.7%	3.6%	n/a
Barclays 1-10 TIPS	Inflation	1.8%	11.4%	6.7%	4.6%	7.7%
90 Day T-Bill	Cash	0.0%	0.2%	2.4%	3.0%	3.0%
<b>Global Fixed Income Benchmarks</b>						
Citigroup World Govt Bond	Global Bonds	-1.9%	2.6%	8.1%	4.5%	6.6%
BC Global Aggregate Bond	Global Bonds	0.3%	5.1%	5.3%	4.8%	5.8%
J.P. Morgan EMBI Plus	Em. Mkt. Bonds	1.4%	26.0%	6.6%	8.4%	10.9%
<b>Alternative Benchmarks</b>						
DJ US8 Commodity Index	Commodities	9.0%	18.9%	-3.8%	2.0%	7.1%
NCREIF Property Index	Real Estate	-2.1%	-16.9%	-3.4%	4.8%	7.3%
Wishare REIT Index	REITs	9.2%	28.6%	-13.6%	-0.0%	10.7%
HFRI Fund of Funds	Hedge Funds	1.5%	11.5%	-1.1%	2.8%	4.0%
HFRI FoF Conservative	Hedge Funds	1.1%	9.7%	-1.8%	1.7%	3.6%
90 Day T-Bills + 2%	Cash + 2%	0.6%	2.2%	4.4%	5.1%	5.0%
Cambridge PE Lagged	Private Equity	6.2%	-9.9%	3.7%	13.1%	9.3%
Cambridge VC Lagged	Venture Capital	2.3%	-12.9%	2.1%	5.7%	2.6%
CPI	Inflation	0.8%	2.8%	2.3%	2.6%	2.6%



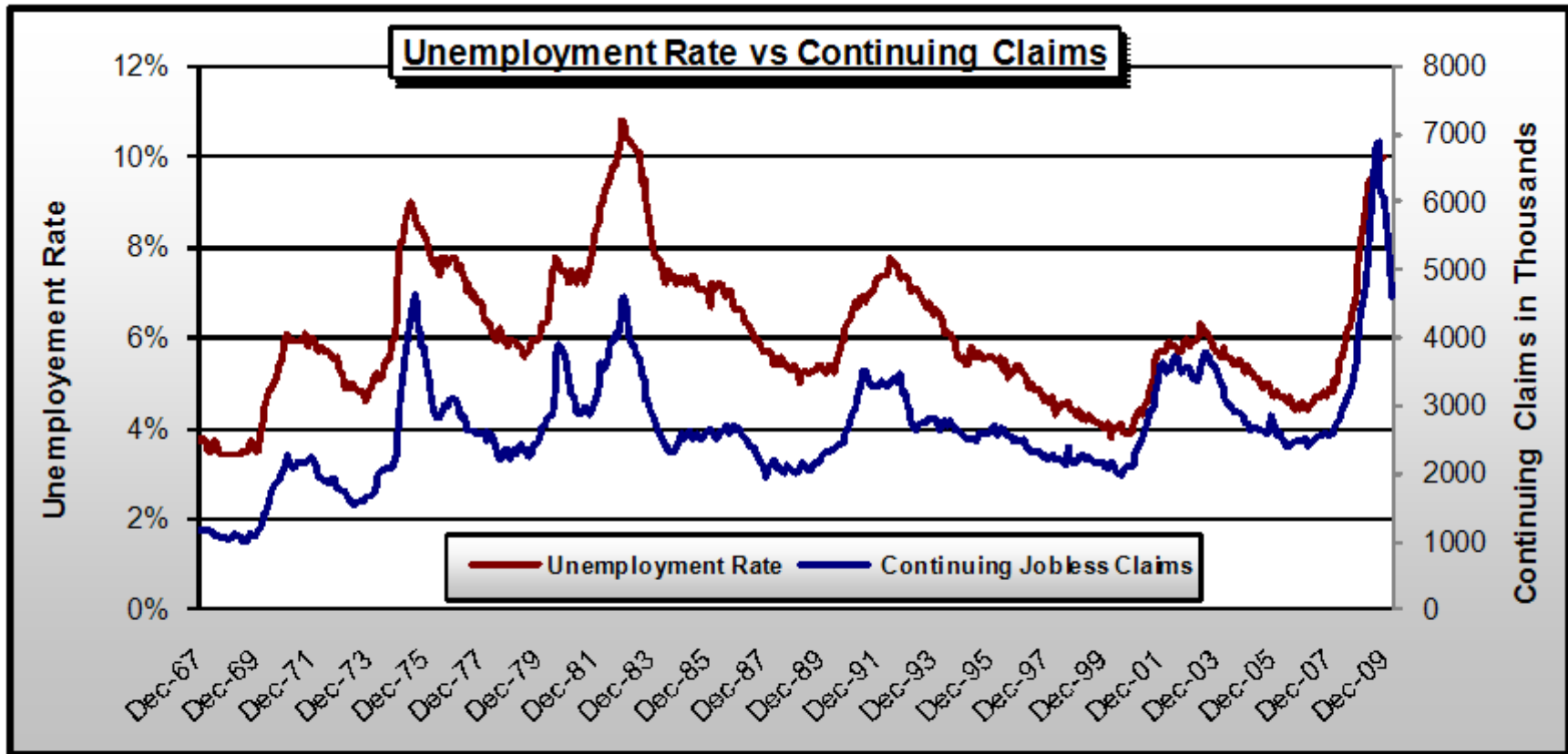
Note: Cambridge Private Equity and Venture Capital indices are lagged by one quarter.

# Market Environment – U.S. Economy



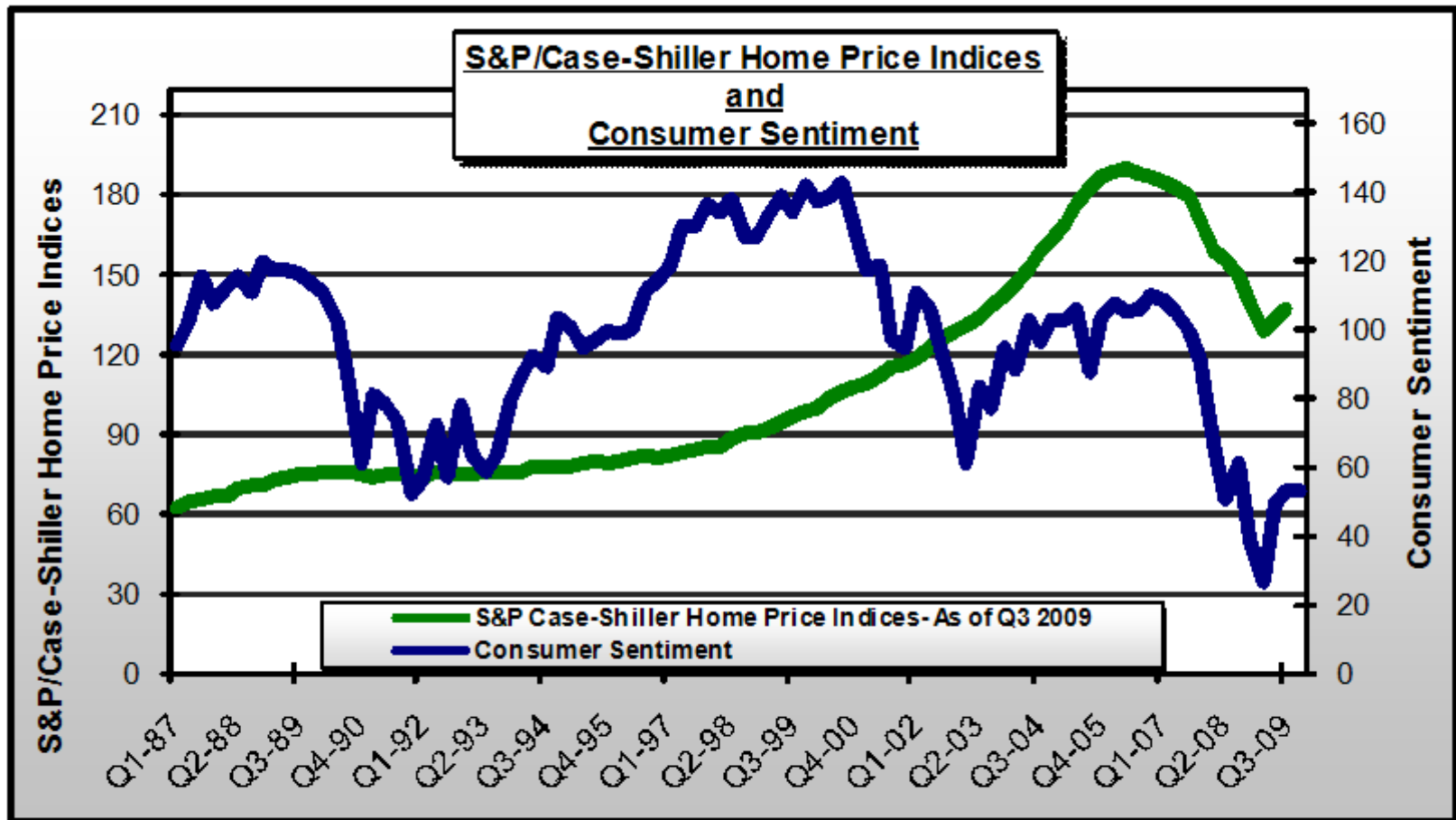
Source: U.S. Department of Commerce: Bureau of Economic Analysis

# Market Environment – U.S. Economy



**Unemployment rate hit 10.0% in Q4 2009; however US Continuing Jobless Claims decreased from last quarter...**

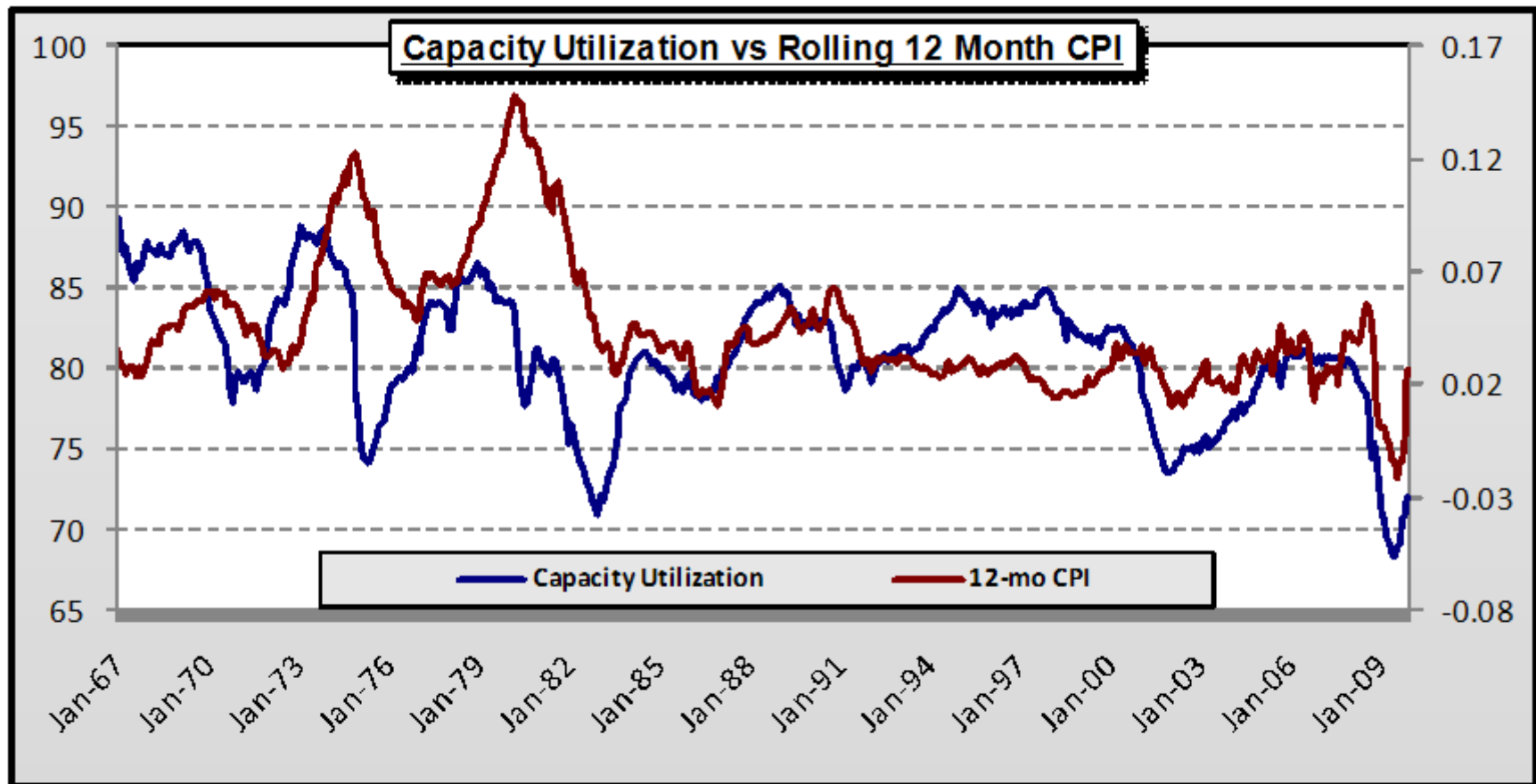
# Market Environment – U.S. Economy



**Housing prices have fallen 28% from their peak in Q2 2006; Consumer sentiment slightly decreased in Q4 2009...**

Source: Standard & Poor's and Bloomberg

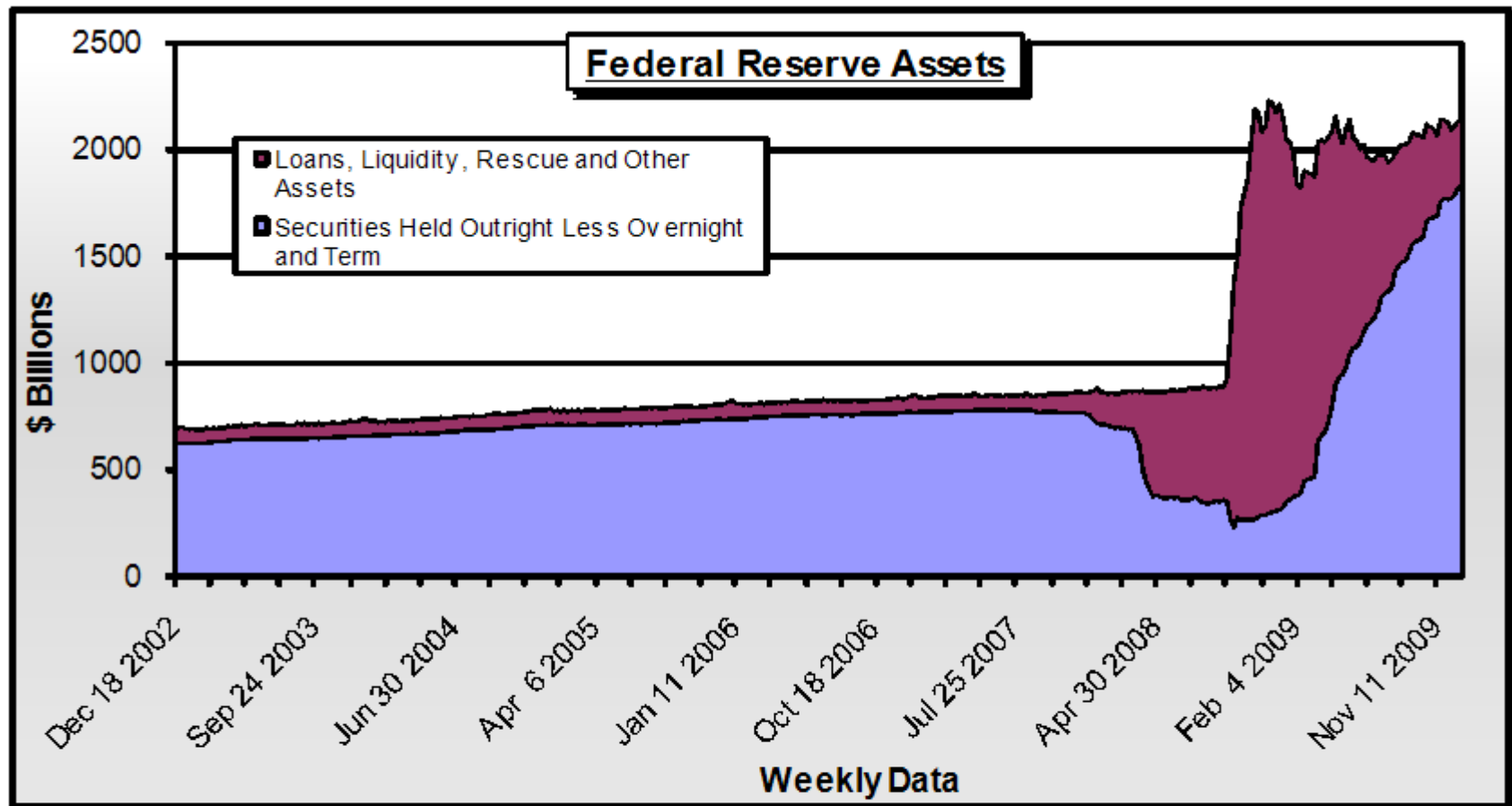
# Market Environment – U.S. Economy



**In the near term, inflation is less of a concern with a great deal of economic slack to work through before prices and wages come under pressure...**

Source: Bloomberg

# Market Environment – U.S. Economy



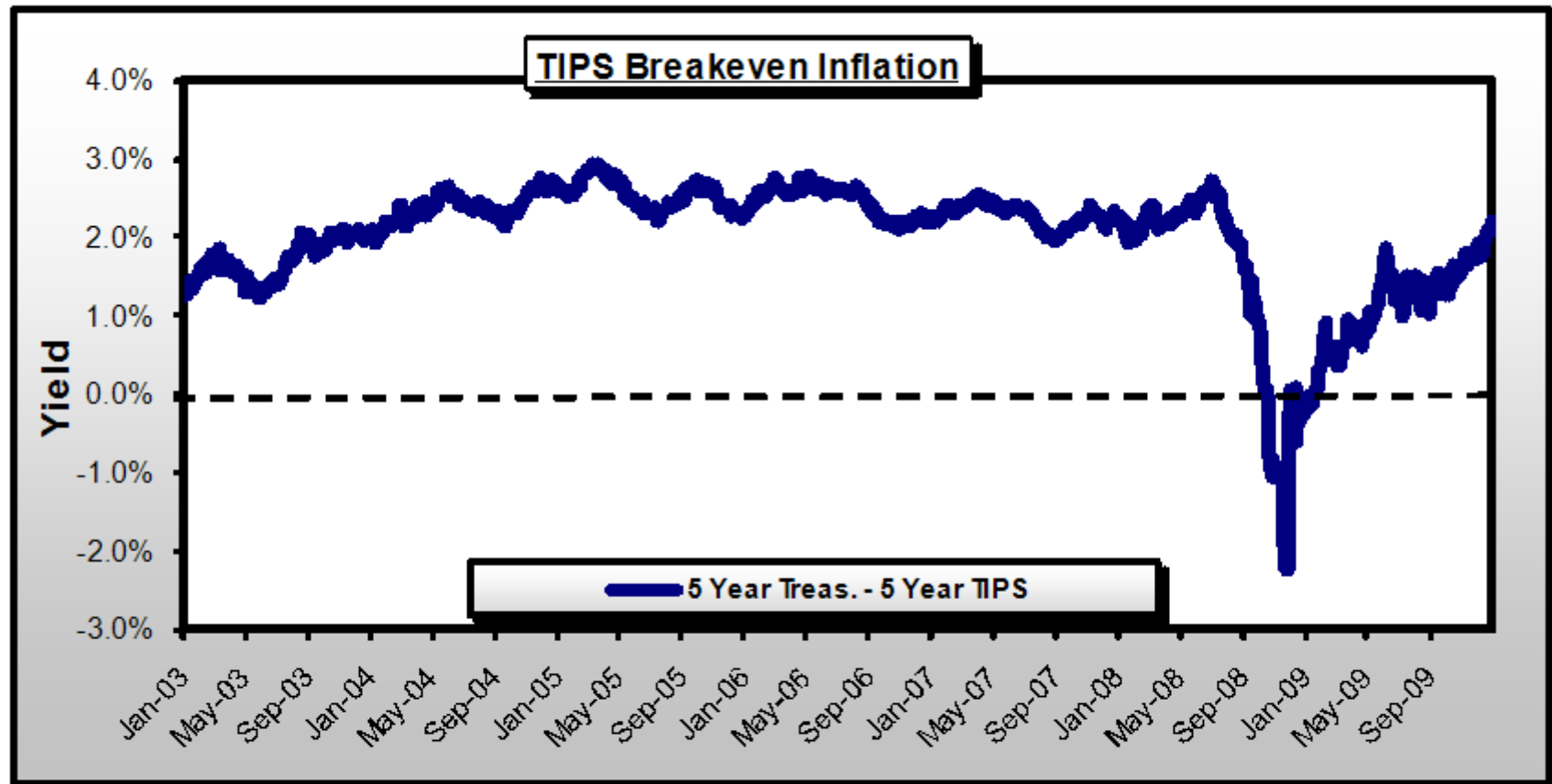
**Tremendous intervention by the Fed has been critical in restarting economic growth, but unwinding this balance sheet could spark inflation...**

Source: United States Federal Reserve H.4.1, as of September 23, 2009





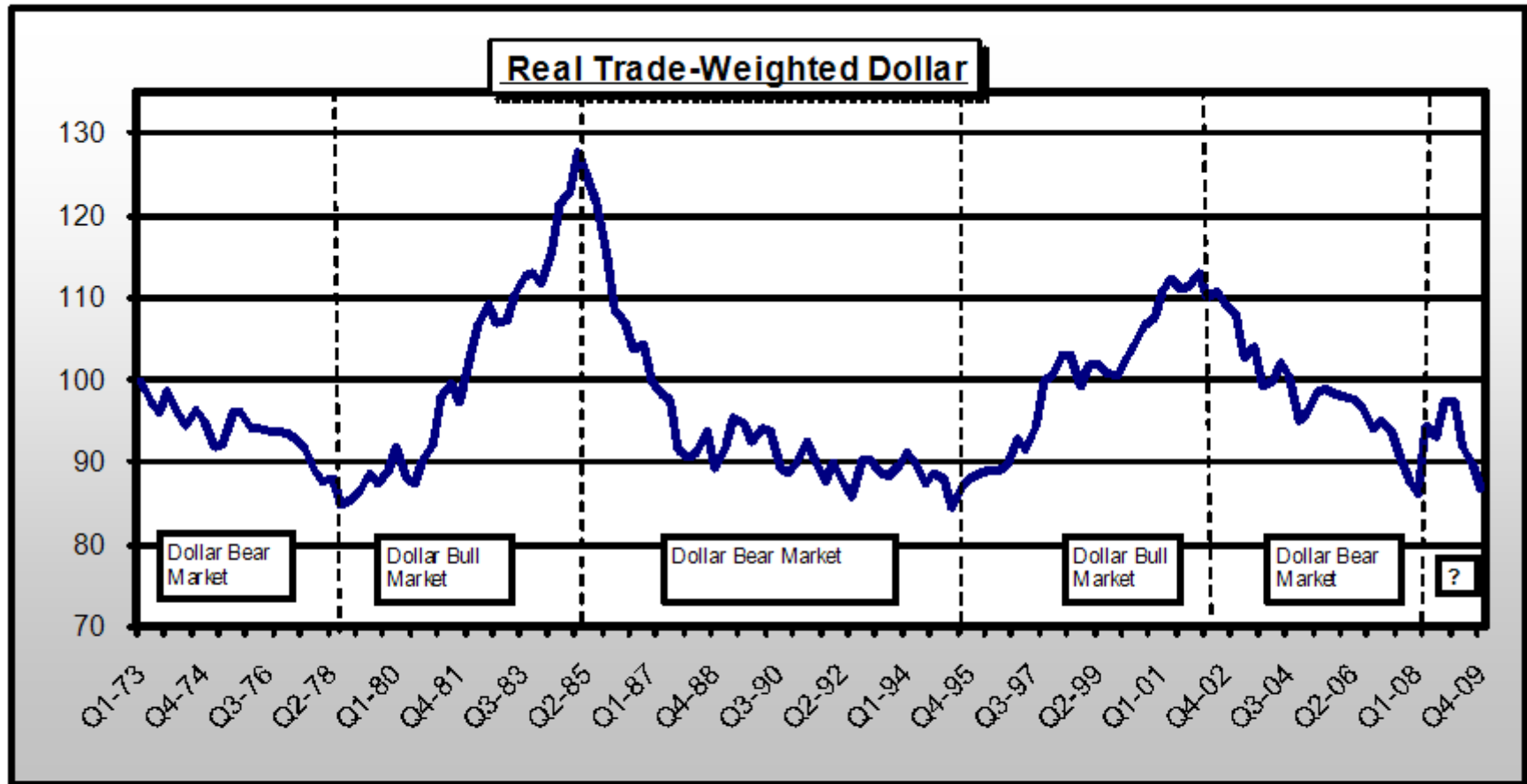
# Market Environment – U.S. Economy



**TIPS Breakeven Inflation is 2.2% after dipping below -2% in November 2008...**

Source: United States Federal Reserve

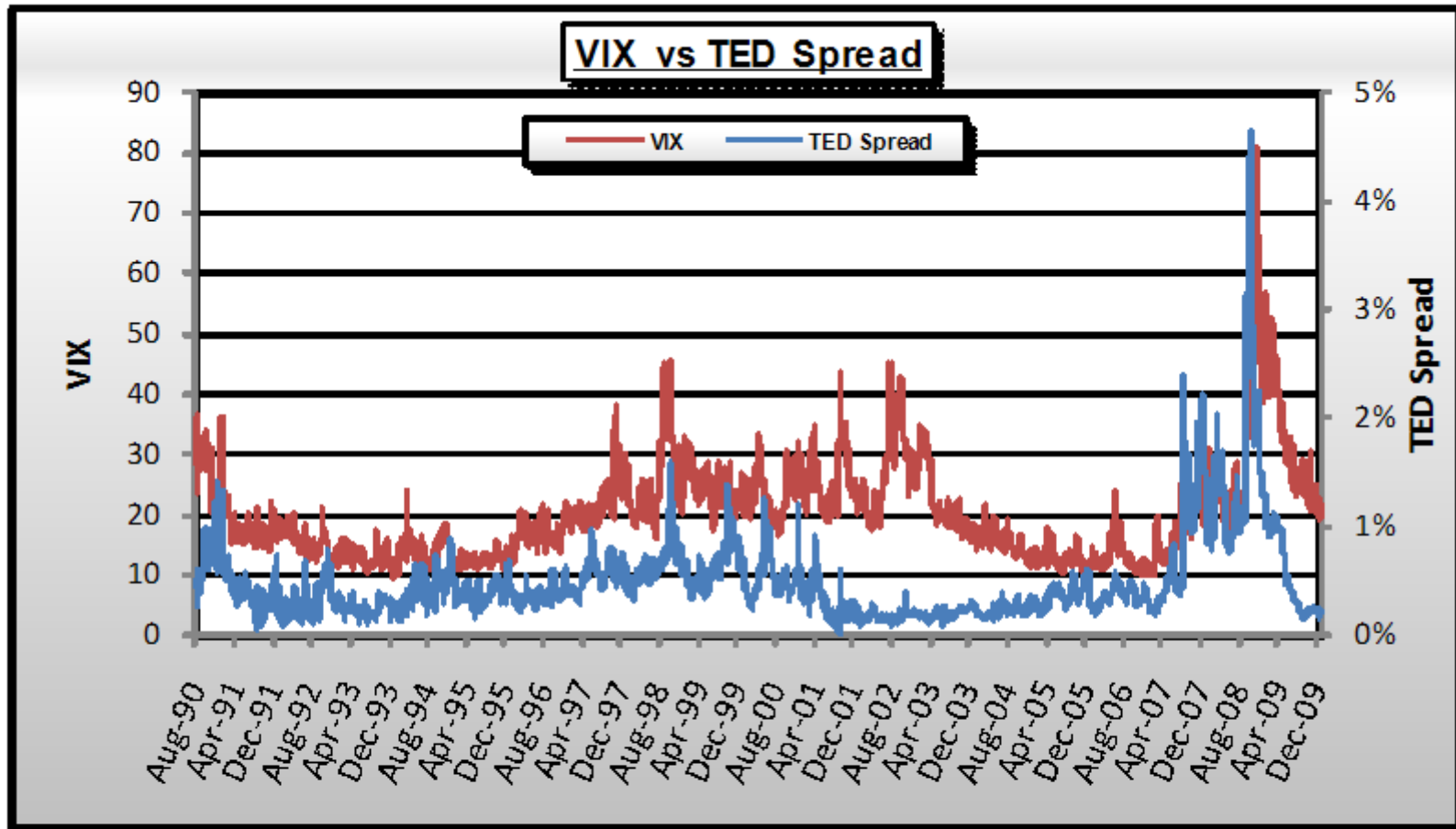
# Market Environment – U.S. Economy



**The Dollar depreciated in Q4 2009...**

Source: Bloomberg and St. Louis Federal Reserve

# Market Environment – U.S. Economy



**Key fear indicators such as the VIX and TED Spread (90 Day Libor - 90 Day T-Bill) have stabilized after hitting record highs in Q4 2008...**



# Domestic & International Equities

- All capitalizations and styles were positive during the quarter except for Non-U.S. Small Cap
  - S&P 500 continued to rally, returning 6.0% in the quarter, and 26.4% for the year
  - Russell 2000 performance in December was the third best ever, returning 8.0%
  - Low quality stocks continue to outperform
- Large Cap is expensive, Small cap is cheap, relative to historical P/E averages
- Earnings yield continues to exceed bond yield
- Consensus estimates indicate EPS growth is expected to increase by 37% in 2010
- S&P momentum continues to show a bullish signal
- Small Cap trails Large Cap by 0.8% for the year, after a strong fourth quarter for large cap
- Growth stocks outperformed value stocks by 17.5% for the year
- International Equity outperformed Domestic Equity by 15.1% for the year
  - MSCI EAFE Index up 78% since March 9, 2009 bottom, and 31.8% for the year
  - MSCI Emerging Markets Index up 78.5% for the year



# Fixed Income

- Markets that sold off the most in 2008 performed the best in 2009
  - A good year for active investment grade managers.
- Record Treasury issuance occurred in 2009
- Interest rates rose across the yield curve during the quarter
  - Short term rates still anchored near zero, but the curve is now markedly steeper.
  - Fed leaves benchmark rate unchanged at 0 – 0.25%.
- High Yield markets were up 58.2% for the year
  - Spreads have compressed significantly as liquidity has returned to the market, while defaults have risen.
- The FOMC continues to reiterate their view that economic conditions warrant exceptionally low rates
  - With fiscal stimulus deployed throughout the market, it's hard to see the Fed hiking rates until some of the aid and stimulus is withdrawn.



# Private Markets

- Where we were

- Credit was available and underwriting standards were favorable to the borrower
  - Purchase Multiples were increasing
  - Capital Structure was laden with debt
  - Companies took on more debt
  - Dividend recaps were debt financed
- The consumer was spending and not saving
  - Earnings were up

- Current Environment

- Earnings are down
- Underwriting standards have become more stringent
- Debt is not easily available
- Consumers are saving more
- Unemployment is high – possible jobless recovery
- FAS 157 will require additional write-downs of private assets

- Opportunities Exist

- Opportunities now exist as a result of the credit crisis
- Secondary Funds will see more opportunities due to widespread need for liquidity
- Distressed and Mezzanine



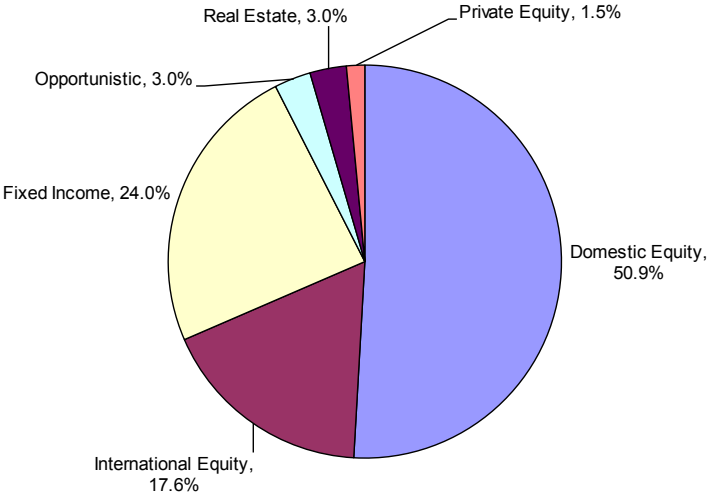
# ASRS Total Fund Review

Note: All of the data included in this report is as of December 31, 2009, unless otherwise noted.

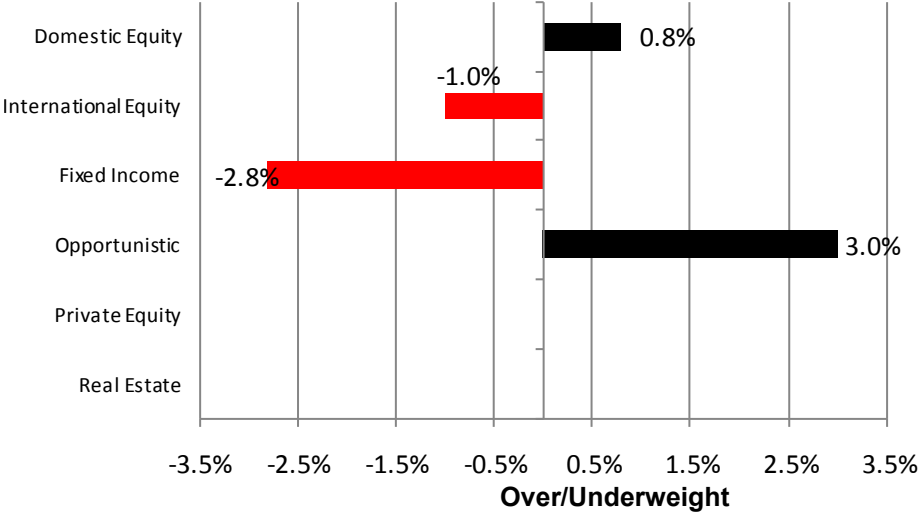


# Total Fund Asset Allocation

Actual Asset Allocation



Actual Asset Allocation vs. Policy Adjusted for Transition into Real Estate and Private Equity



Note: Real Estate and Private Equity market values are reported on a quarter-lag, and adjusted to include the current quarter's cash flows. Within the Policy Adjusted for Transition chart, Real Estate was prorated to domestic equity, international equity, and fixed income while Private Equity was prorated to domestic equity.





# ASRS Investment Program Investment Goals

Macro

- Goal #1: Achieve a total fund rate of return equal to or greater than the actuarial assumed interest rate.
- Goal #2: Achieve a total fund rate of return equal to or greater than the asset allocation benchmark.
- Goal #3: Achieve a total fund rate of return equal to or greater than the amount projected in the most recent asset allocation study.
- Goal #4: Achieve asset class net rates of return equal to or greater than their respective broad asset class benchmarks.
- Goal #5: Achieve portfolio-level net rates of return equal to or greater than their respective portfolio benchmarks.
- Goal #6: Ensure sufficient monies are available to meet cash flow requirements.

Micro





# Total Fund Performance

**Goal #1: Achieve a 10-year rolling annual rate of return equal to or greater than 8%**

	<b>10 Year Annualized Return</b>
<b>Total Fund</b>	<b>2.7%</b>
<b>Constant 8%</b>	<b>8.0%</b>
<b>Excess Return</b>	<b>-5.3%</b>

**Goal Met: No**



# Total Fund Performance

**Goal #2: Achieve annual and 3 year rolling annual rates of return equal to or greater than the return of the Asset Allocation Benchmark (SAA Benchmark)**

	Quarter	6 months	1 Year	3 Years	5 Years	10 Years	Since Inception (6/30/75)
Total Fund <sup>1</sup>	4.0%	17.9%	22.2%	-1.6%	3.0%	2.7%	9.9%
SAA Benchmark*	3.6%	16.8%	22.5%	-1.3%	3.1%	2.2%	9.7%
Excess Return	0.4%	1.1%	-0.3%	-0.3%	-0.1%	0.5%	0.2%

1 Year Goal Met: No

3 Year Goal Met: No

\*Benchmark Policy History can be found on the last page of this presentation.





# Total Fund Performance

**Goal #3: Achieve a 5 year rolling annual rate of return equal to or greater than the projected return expectation in the ASRS Asset Allocation Study**

	<b><u>5 Year Annualized Return</u></b>
<b>Total Fund</b>	<b>3.0%</b>
<b>AA Expected Return</b>	<b><u>7.9%</u></b>
<b>Excess Return</b>	<b>-4.9%</b>

**Goal Met: No**



# ASRS Asset Class Performance vs. Benchmarks

**Goal #4: Achieve annual and 3 year rolling annual investment asset class net rates of return equal to or greater than their respective broad asset class benchmarks**

	1 Year Return	3 Year Return
ASRS Domestic Equity	29.5%	-4.4%
Domestic Benchmark*	27.9%	-5.0%
Excess Return	1.6%	0.6%
ASRS International Equity	33.9%	-4.7%
MSCI ACWI ex-U.S.	41.5%	-3.5%
Excess Return	-7.6%	-1.2%
ASRS Fixed Income	10.2%	6.5%
BC Aggregate	5.9%	6.0%
Excess Return	4.3%	0.5%
ASRS GTAA	22.6%	0.3%
Custom Benchmark**	21.8%	-2.0%
Excess Return	0.8%	2.3%
ASRS Real Estate	-28.9%	-13.7%
NPI + 1%	-21.2%	-0.3%
Excess Return	-7.7%	-14.0%
ASRS Private Equity	-15.9%	N/A
Russell 3000 + 300 bps	32.1%	-2.6%
Excess Return	-48.0%	N/A

**Goal Met: Partially**

\* Domestic Equity Benchmark was S&P 500 through 12/31/2006 and 74% S&P 500, 13% S&P 400, 13% S&P 600 thereafter

\*\* GTAA Custom Benchmark is 56% S&P 500; 28% BC Agg; 16% MSCI EAFE



# ASRS Manager Performance vs. Benchmarks

**Goal #5: Achieve annual and 3-year rolling annual portfolio level net rates of return equal to or greater than their respective portfolio benchmarks**

	1 Year	3 Years
<b>Outperformers #</b>	<b>25</b>	<b>20</b>
<b>Underperformers #</b>	<b>31</b>	<b>11</b>
<b>Outperformers%</b>	<b>81%</b>	<b>65%</b>

**Goal Met: Yes**



# ASRS Cash Management

**Goal #6: Ensure all pension benefits, health insurance, member refunds, administrative payments, and other requirements are made from available cash balances and without utilizing alternate liquidity options.**

<b>Month</b>	<b>Master Cash Balance pre-run</b>	<b>Net Pension Run</b>	<b>Master Cash Balance post-run</b>
Jan-09	\$183,373,818	-\$140,269,578	\$34,406,356
Feb-09	\$153,266,188	-\$141,848,592	\$13,281,836
Mar-09	\$171,026,399	-\$141,899,846	\$37,519,837
Apr-09	\$166,981,452	-\$141,910,214	\$30,480,184
May-09	\$153,741,143	-\$142,080,609	\$102,266,079
Jun-09	\$152,092,343	-\$142,386,547	\$38,765,983
Jul-09	\$80,736,511	-\$145,381,006	\$41,605,461
Aug-09	\$177,951,392	-\$148,319,471	\$36,023,992
Sep-09	\$181,782,602	-\$148,999,811	\$32,571,030
Oct-09	\$163,499,186	-\$149,551,320	\$20,547,400
Nov-09	\$164,395,519	-\$150,385,154	\$23,388,095
Dec-09	\$192,641,724	-\$150,384,698	\$53,256,380

**All Pension Obligations, Capital Calls and Other  
Requirements Met with Available Cash**

**Goal Met: Yes**



# Total Fund Performance Comparison\*

	1 Year	3 Years	5 Years	10 Years
<b><u>Independent Consultant's Cooperative</u></b>				
Master Trust Funds - Total Funds	31	62	60	80
Total Funds - Public	23	58	56	82
Total Funds over \$1 B - Public	22	38	55	74
Total Funds - Corporate	41	64	68	81
<b><u>Callan Associates Inc.</u></b>				
Master Trust Funds - Total Funds	33	61	61	79
Total Funds - Public	27	58	62	82
Total Funds over \$1 B - Public	28	52	70	83
Total Funds - Corporate	43	68	66	77

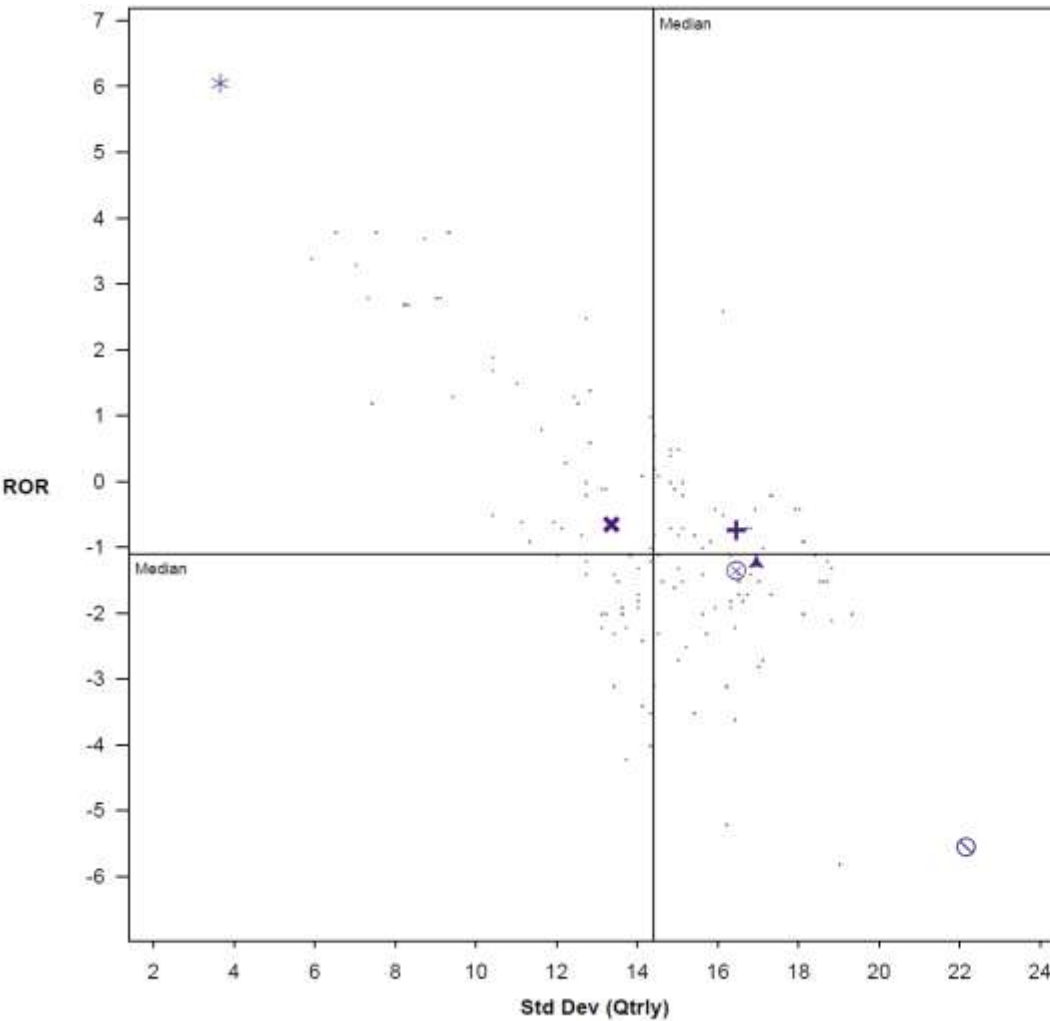
\*The information contained herein is for comparison purposes only and is not a Total Fund performance benchmark. Peer universe comparisons are subject to several limitations, including: peer groups are not comprehensive, several funds are included in multiple peer groups, peer groups are constructed using gross of fees returns, and survivorship bias in that poorly performing funds may no longer continue to report results.

Note: Universes are constructed using gross of fee returns; therefore, the ASRS rank is based on gross of fee returns.





# 3 Yr. Return/Volatility vs. Public Funds



NAME	Return		Standard Deviation		Sharpe Ratio	
⊗ TOTAL FUND	-1.4	58	16.5	80	-0.2	55
▲ INTERIM TOTAL FUND BENCHMARK	-1.3	56	17.0	87	-0.2	53
+ TOTAL FUND BENCHMARK	-0.9	46	16.5	82	-0.2	42
⊙ S&P 500	-5.6		22.2		-0.4	
* BC AGGREGATE	6.0		3.7		1.0	
✕ 60% S&P 500/40% BARCLAYS AGG	-0.7		13.4			
Median	-1.1		14.4		-0.2	

\*Interim Benchmark (current): 35% S&P 500, 7% S&P 400, 7% S&P 600, 27% Barclays Capital Aggregate, 19% MSCI ACWI ex-U.S., 4% NCREIF Property Index + 100 bps (lagged one quarter), and 1% Russell 3000 + 300 bps

Note: Interim Benchmark incorporates a proration of 2% real estate and 6% private equity  
Returns are Gross of Fees



# Investment Outlook



# NEPC 2010 Capital Market Observations & Expectations

- **2009 was a helpful respite for investors**
  - Recovery across all risky markets; a strong reversal of 2008
  - Credit recovered faster than expected
  - Financial system away from brink on Fed/Treasury actions, without current inflation
  - Opportunity to re-focus on risk management after a strong return year
  - Despite recovery, major structural imbalances remain
- **Risk of long-term inflation is at highest level in nearly thirty years**
  - Short-term inflation remains contained
  - What will Federal Reserve do if inflation increases before employment picks up?
  - Some inflation could come in the form of a devaluing US dollar
- **Dollar expected to continue long-term weakening trend along with other developed currencies**
  - Expect strong dollar rallies but also large drops, despite “everyone’s best interest” in a gradual decline
  - Diversification out of US dollar as primary reserve currency
  - Devaluation relative to emerging currencies due to lower growth and weaker balance sheet
- **Forward-looking expected returns have declined**
  - Based on consistent long-term expectations adjusted for 2009 gains
  - Unemployment, high debt levels, and general uncertainty impair the real economy
  - Recovery based on government actions instead of consumers and small businesses



# NEPC 2010 General Actions for Clients

- Continue to assess the future from a risk management perspective
  - Confirm long-term goals and objectives
    - Where is risk being taken? – Risk budgeting
    - What environments are unlikely but harmful? – Scenario analysis
  - Avoid chasing returns in a lower return environment
- Review the role of fixed income
  - Meeting program objectives – liquidity, timing, duration, nominal/real commitments
  - Tail-risk management for deflation and inflation
  - Short-term yields are low, the yield curve is steep and credit spreads have tightened
  - Future credit opportunities involve manager skill more than just market exposure
    - Give greater discretion to managers with a broad credit skill set
    - Lend with favorable terms in distressed debt, mezzanine lending or debtor in possession
- Build strategic exposure to real assets
  - Higher inflation expectations may already be priced into some markets
- Consider illiquid investments for increased expected returns
  - Demand continues, while traditional suppliers have exited the market
  - Lock-ups protect investors from “fast money”
  - Measure sizing and pacing using project plans and liquidity analysis
- Overweight emerging market investments to protect from dollar losses
- Retain focus on diversification in a time of uncertainty



# NEPC 2010 Focused Actions for Public Funds

- **Exploit the Illiquidity Premium**
  - Long-term investment horizons help mitigate lock-up concerns
  - Investment horizons reconcile with illiquid asset comment/investment horizons
  - With subdued expectations for traditional asset returns, illiquid assets offer some Total Return recapture
- **Continue with Non-Dollar Diversification**
  - Consider higher allocations to Emerging Market Debt and Equity...again, liquidity horizons match-up well for public funds
  - In the current environment, an ideal approach to mitigating US dollar concentration risk
- **Re-focus on Inflation Protection**
  - Renewed attention on Real Return
  - High inflation would likely lead to pressure for COLAs (or higher COLAs)



# What Happened and What IMD Did During 4Q 2009

## What Happened

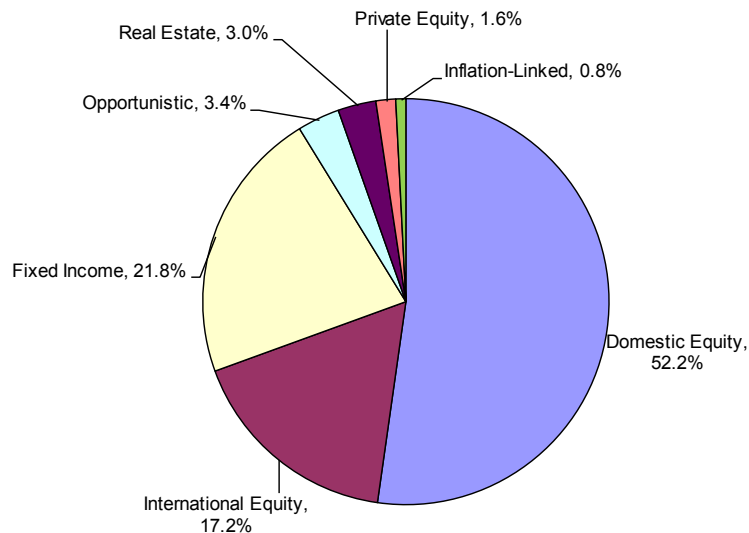
- Asset classes continued to rally, although at a slower pace than the prior two quarters
  - Fixed income spread markets improved modestly, led by CMBS and Corporates
  - Equities (U.S. and International) posted positive single digit returns
- Dollar reversed course and strengthened late in the quarter
- Actual Q4 S&P Corporate earnings exceeded estimates
- Unemployment continued its march up to 10%

## IMD Activities

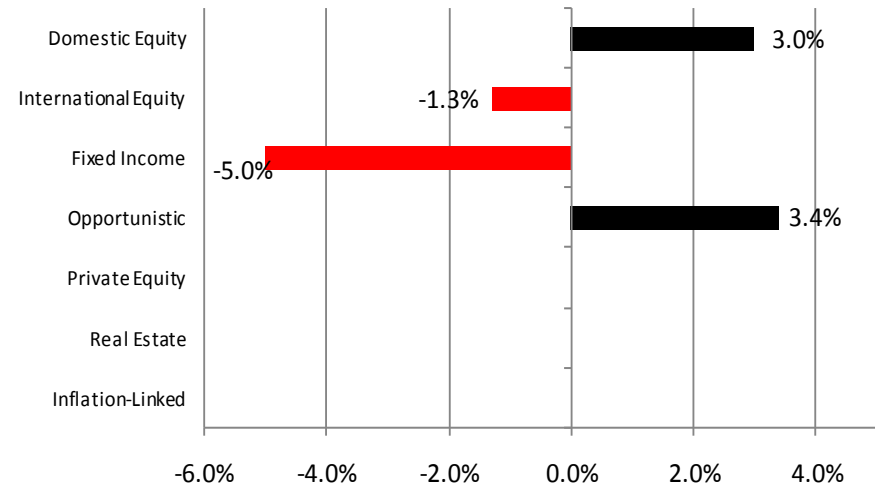
- Re-balanced equity from U.S. Mid Cap to ACWI ex-U.S.
  - U.S. Mid Cap equities had rallied strongly, leading to an overweight, while International had been underweight.
- Cash for pension funding was raised from overvalued asset classes (U.S. Mid Cap and CMBS fixed income)
- Continued restructuring fixed income consistent with ASRS policy allocation
- Hired 1 core fixed income investment manager and 1 opportunistic investment manager; terminated 1 core plus fixed income investment manager.
  - Continued funding 2 high yield managers and provided additional funding to existing opportunistic managers.

# Where are We Now? (As of 3/5/2010)

## Actual Asset Allocation



## Actual Asset Allocation vs. Policy Adjusted for Transition into Real Estate and Private Equity\*



• Real Estate, Private Equity and Inflation-Linked Assets actual weights are equal to policy weights during the implementation of these asset classes.

\*\* Over/Under- weights include both GTAA positions as well as IMD tactical considerations.



# IMD Investment House Views

- **Fixed Income**
  - Liquidity in the fixed income markets continues to improve as a result of a continued accommodative Federal Reserve monetary policy.
  - Interest rate risk is increasing as the market focuses on the end of the Fed's asset- buying program, anticipated heavy Treasury issuance, and the uncertainty of the future appetite or where-with-all of foreign investors to buy U.S. fixed income securities.
  - IMD has reduced ASRS exposure to interest rate sensitive core markets and has slightly increased, via the opportunistic bucket, exposure to select opportunities in high yield, leveraged loans, structured credit, distressed and rescue financing.
- **US Equities**
  - U.S. Equity advance is likely to be more laborious with the easiest part to occur early in the year.
  - The specifics of how and when the Fed exits quantitative easing might be a dampener for equities.
  - Consistent with ASRS strategic asset allocation policy, we anticipate using U.S. equities to fund inflation-linked investments and, in part, ASRS capital call commitments to private markets.
- **International Equities**
  - Even with non-U.S. equities doing spectacularly well last year, the valuations of emerging markets are reasonable and not at bubble levels.
  - The Asian economies, apart from Japan, continue to rebound ahead of Western economies.
  - IMD maintains an aggregate policy under-weight to non-U.S. equities, but will look to move closer to policy weights in both U.S. and non-U.S. equities.





# IMD Investment House Views

- **Private Equity**

- Private Equity program continues to seek managers that have a proven record of accomplishment and top quartile returns; who manage funds that target companies with enterprise values consistent with the lower middle, small and micro markets
- This segment of the market has historically been recognized as having employed lower leverage and achieved lower purchase price multiples due to its expansive and thus, less efficient and competitive nature.
- We continue to evaluate opportunities in 1) secondaries, which if available, will take advantage of forced liquidity driven sellers; 2) energy, clean tech and certain focused infrastructure opportunities; and 3) distressed-for-control, turnaround and buyout funds

- **Real Estate**

- Private real estate opportunities exist primarily in debt as price declines continue.
- Future re-financings will likely be characterized by much tighter lending standards, lower loan-to-value and higher interest rates.
- The ASRS real estate program is positioned to take advantage of future opportunities given approximately 50% of the ASRS program policy allocation is currently unfunded.

- **Opportunistic**

- Despite tightening credit spreads, IMD believes most of the opportunities continue to be in select fixed income markets such as high yield, leveraged loans, structured credit, distressed debt for control and rescue financing strategies.
- In mid-Jan 2010, about \$200 million was invested in TIPS as a tactical hedge against unanticipated inflation and as a surrogate to nominal Treasuries.
- Via the Public Markets Committee, IMD anticipates the selection and funding of 1-2 long commodity strategies which will likely result in a 2-3% aggregate ASRS exposure to inflation-link assets.



# Appendix



# ASRS Total Fund Benchmark History

## Policy History:

- 7/1/75 – 12/31/79 – 40% S&P 500/60% Barclays Capital Aggregate
- 1/1/80 – 12/31/83 – 50% S&P 500/50% Barclays Capital Aggregate
- 1/1/84 – 12/31/91 – 60% S&P 500/40% Barclays Capital Aggregate
- 1/1/92 – 12/31/94 – 50% S&P 500/40% Barclays Capital Aggregate/10% MSCI EAFE
- 1/1/95 – 6/30/97 – 45% S&P 500/40% Barclays Capital Aggregate/15% MSCI EAFE
- 7/1/97 – 12/31/99 – 50% S&P 500/35% Barclays Capital Aggregate/15% MSCI EAFE
- 1/1/00 – 9/30/03 – 53% S&P 500/30% Barclays Capital Aggregate/17% MSCI EAFE
- 10/1/03 – 12/31/06 – 53% S&P 500/26% Barclays Capital Aggregate/15% MSCI EAFE/ACWI ex-U.S.<sup>1</sup>/6% NCREIF Property Index + 100 bps (lagged one quarter)
- 1/1/07 – 10/31/2009 – 31% S&P 500/7% S&P 400/7% S&P 600/26% Barclays Capital Aggregate/18% MSCI ACWI ex-U.S./6% NCREIF Property Index + 100 bps (lagged one quarter)/5% Russell 3000 + 300 bps
- 11/1/2009 – present – 28% S&P 500/6% S&P 400/6% S&P 600/24% Barclays Capital Aggregate/2% Barclays Capital High Yield/13% MSCI EAFE/2% MSCI EAFE Small Cap/3% MSCI Emerging Markets/6% NCREIF Property Index + 100 bps (lagged one quarter)/7% Russell 3000 + 300 bps/3% Commodities<sup>2</sup>

\*Interim Benchmark (current): 35% S&P 500, 7% S&P 400, 7% S&P 600, 27% Barclays Capital Aggregate, 19% MSCI ACWI ex-U.S., 4% NCREIF Property Index + 100 bps (lagged one quarter), and 1% Russell 3000 + 300 bps

Note: Interim Benchmark incorporates a proration of 2% real estate and 6% private equity

<sup>1</sup>MSCI EAFE/ACWI ex-U.S. Benchmark is the MSCI EAFE prior to 10/1/2005 and the MSCI ACWI ex-U.S. thereafter

<sup>2</sup>The benchmark the ASRS will utilize for its allocation to Commodities is to be determined. The Dow Jones/UBS Commodities Index was used as a proxy in the interim.